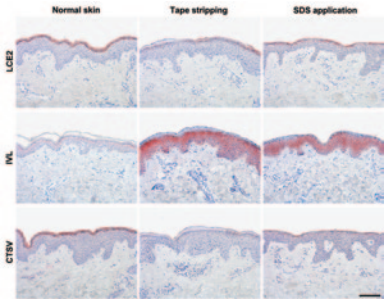
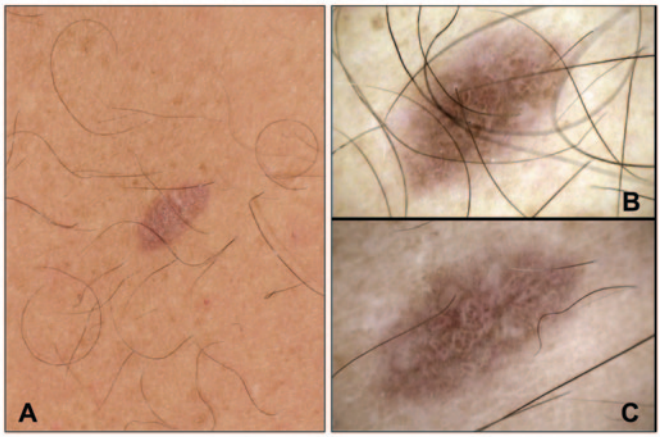
Structural protein expression upon artificial barrier disruption



mRNA and protein expression levels of structural proteins and regulatory molecules were examined after sodium dodecyl sulphate (SDS) application on normal skin, and tape stripping of uninvolved epidermis of patients with psoriasis and atopic dermatitis (AD) and healthy controls. Upon tape stripping, several structural molecules were significantly downregulated including LCE5A, LCE2B, FLG, FLG2 and LOR, whereas others were upregulated: IVL, SPRR1, SPRR2, HRNR and most notably LCE3A. The epidermal crosslinking enzymes TGM1, TGM3 and TGM5 were all upregulated, whereas proteases involved in the desquamation process (CTSV, KLK5 and KLK7) were downregulated or unaffected. Most results were similar in SDS-instigated irritant contact dermatitis. Acute skin barrier disruption induced a temporary barrier repair response which was similar in healthy skin and nonlesional skin of patients with psoriasis or AD. *Br J Dermatol* 2012; 166: 1245–54.

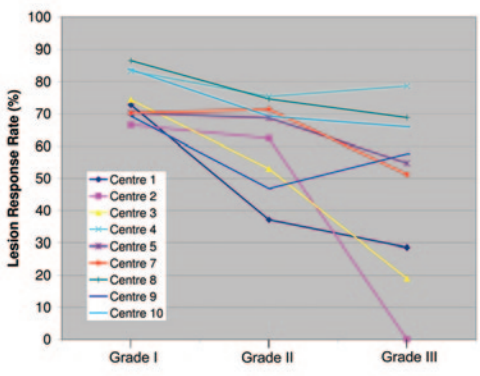
Slow-growing melanomas

Terushkin *et al.* retrospectively analysed a dermoscopic image dataset, from 15 pigmented lesion clinics, of slow-growing melanomas (SGM) that were followed sequentially by digital dermoscopy for at least 1 year. The series consisted of 92 SGM. SGM, over time, became more disorganized, revealed a loss of network in favour of structureless areas, developed a negative network, and exhibited new colours such as dark brown, black, grey, blue, red and white. The majority of lesions (75%) remained the same size or grew by < 2 mm in diameter. Physicians should not rely solely on change in size but should pay particular attention to the above dermatoscopic changes in the follow-up of melanocytic lesions. *Br J Dermatol* 2012; 166: 1213–20.



Daylight-mediated PDT of actinic keratoses

Wiegell *et al.* conducted a randomized multicentre study to evaluate efficacy of daylight-mediated photodynamic therapy (PDT) for different severity grades of actinic keratoses (AKs). One hundred and forty-five patients with a total of 2768 AKs of the face and scalp were randomized to either



1½ h or 2½ h of daylight exposure. No difference in lesion response was found between the 1½ h and 2½ h exposure group. The mean lesion response rate was significantly higher in grade I lesions (75.9%) than in grade II (61.2%) and grade III (49.1%) lesions ($P < 0.0001$). However, nearly all thicker lesions (grades II and III) were reduced to a lower lesion grade 3 months after a single treatment of daylight-mediated PDT, and therefore repeated treatments with daylight-mediated PDT may be recommended for thicker lesions as in conventional PDT. *Br J Dermatol* 2012; 166: 1327–32.

Homeopathy for eczema

A systematic review of all controlled trials of homeopathy in patients with eczema is reported. Searches were carried out on 17 November 2011 and updated on 7 February 2012. Methodological quality was estimated using the Jadad score. Of 96 articles generated, one randomized and two nonrandomized clinical trials met the inclusion criteria. All were methodologically weak. The available trial data are poor and low quality and do not demonstrate homeopathic remedies to be efficacious as a treatment for eczema. *Br J Dermatol* 2012; 166: 1170–72.